



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,372	06/23/2003	Rex C. Donahey	1547520/58400	7479

26386 7590 11/30/2004

DAVIS, BROWN, KOEHN, SHORS & ROBERTS, P.C.
THE FINANCIAL CENTER
666 WALNUT STREET
SUITE 2500
DES MOINES, IA 50309-3993

EXAMINER

GLESSNER, BRIAN E

ART UNIT PAPER NUMBER

3635

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,372

Applicant(s)

DONAHEY ET AL.

Examiner

Brian E. Glessner

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1103 and 3/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claims 1-6, the scope of the claim is indefinite because the applicant claims a post-tensioning tendon in claim 1, but claims an additional longitudinal element that appears to be performing the same function as the tendon. The examiner believes that the tendon and the longitudinal element are the same element. Therefore, the claims will be examined in this manner until further clarification is provided.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 6, as "best understood", are rejected under 35 U.S.C. 103(a) as being unpatentable over LeJeune et al. (2003/0115822) in view of Presswalla et al. (4,627,203).

In regard to claim 1, LeJeune discloses an insulated concrete panel comprising a first layer 80 of concrete, a second layer 82 of concrete spaced apart from the first

Art Unit: 3635

concrete layer, an insulation layer 30, a plurality of connectors, i.e. the portions of concrete extending between the first layer 80 and the second layer 82 through the concrete layer, interconnecting the two concrete layers through the insulation layer, and a tensioning tendon 22 positioned substantially in the plane of the insulation layer.

LeJeune does not specifically disclose that said tendon is a post-tensioning tendon.

Presswalla teaches that it is known to use post-tensioning tendons in concrete panels.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a post-tensioned tendon in place of a pre-stressed tendon, because the post-tensioned tendon can be tensioned the desired amount after the panel has been installed. Therefore, one could place the proper amount of tension on the panel in the field and will not have to calculate or estimate the pre-stressed tension before hand. Finally, the examiner takes the position that one having ordinary skill in the art is capable of using post-tensioned and pre-stressed tendons interchangeably since they are functionally equivalent.

In regard to claim 2, LeJeune in view of Presswalla disclose the basic claimed invention, wherein a longitudinal element 22 extends over the majority of the panel length. LeJeune and Presswalla do not specifically show the use of anchorage members interconnecting the concrete layers so that the post-tensioning force is transferred to the concrete layers. However, if they did not have some sort of end anchorage that transferred the tension from the tension member to the concrete layers, the panels would not be post-tensioned or pre-stressed panels. Therefore, those having ordinary skill in the art know that pre-stressed and post-tensioned panels have

Art Unit: 3635

end anchorages that maintain the tension in the tendons and transfer the force from the tendons to the concrete layers. Thus, LeJeune in view of Presswalla disclose the claimed limitations of claim 2.

In regard to claims 3 and 6, LeJeune in view of Presswalla disclose the basic claimed invention, wherein the longitudinal element is comprised of a high strength rod, strand, or rebar, and the longitudinal element is adjusted to produce tension in the longitudinal element and compression in the concrete layers.

Claims 4 and 5, as "best understood", and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeJeune et al. (2003/0115822) in view of Presswalla et al. (4,627,203) and further in view of Joannes (4,157,640).

In regard to claim 4, LeJeune in view of Presswalla disclose the basic claimed invention except for specifically disclose that the longitudinal element is placed in a space formed in the insulation layer. Joannes teaches that it is known to form spaces in insulation layers to place reinforcing members. Joannes also teaches that it is known to have connectors extend through the insulation layer to connect outer layers of concrete, column 5, last paragraph. It would have been obvious to one having ordinary skill in the art to use a solid insulation layer having spaces formed therein for the tendons, because by using a single solid layer of insulation, the placement of said insulation will be easier and more efficient. Further, one will not have to worry about making sure all of the individual insulation blocks are in the same plane.

Art Unit: 3635

In regard to claim 5, LeJeune in view of Presswalla and Joannes disclose the basic claimed invention, wherein Presswalla further teaches the use of a sheathing to cover a portion of the longitudinal element.

In regard to claims 7-11, LeJeune in view of Presswalla and Joannes disclose the basic claimed method of constructing an insulated concrete panel comprising the steps of placing a first layer of concrete 80, placing a layer of insulation 30, inserting a plurality of fasteners (figures 16, 17, and column 5, last paragraph of Joannes, and the rejection of claim 4 above), positioning a post-tensioning tendon 22 and Presswalla's teaching, placing a second concrete layer 82, allowing the layers to gain strength, adjusting the tension on the tendon that comprises a high-strength longitudinal element, producing tension in the longitudinal element and compression in the concrete, and forming a duct in the insulation layer (Joannes) for receiving the tendon.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rivas et al., Murray, Richards et al., Muhm, Steenson et al., Record, Chang, Miller, Huettemann and Barker.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Glessner whose telephone number is 703-305-0031. The examiner can normally be reached on Monday through Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 703-308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brian E. Glessner
Primary Examiner
Art Unit 3635

B.G.
November 26, 2004
